

Application No. 08/480,908
Reply to Office Action dated September 30, 2005
Reply to Office Action of March 31, 2005

Independent claim 25 and claim 70 (dependent from independent claim 69) recite an implant with a body having a "substantially frusto-conical configuration" with a thread having a locus forming a "substantially cylindrical configuration." Zdeblick does not teach, disclose, or suggest an implant having a substantially frusto-conical body with a thread having a locus forming a substantially cylindrical configuration. Applicant submits that independent claim 25 and dependent claim 70 are patentable and that dependent claims 28-48, 94, 101-103, 126, 130, 135, 140, 151, 152, and 159-164, dependent from independent claim 25 or claims dependent therefrom, are patentable at least due to their dependency from an allowable independent claim 25.

Independent claim 49 recites an implant having a body with a "substantially cylindrical configuration" and a "truncated side," and a thread having a locus "forming a substantially cylindrical configuration." Zdeblick does not teach, disclose, or suggest an implant having the structure recited in independent claim 49. Applicant submits that independent claim 49 is patentable and that dependent claims 50-68, 93, 95, 104, 127, 131, 136, and 141, and new dependent claims 165-170, dependent from independent claim 49, or claims dependent therefrom, are patentable at least due to their dependency from an allowable independent claim 49.

Claim 3 (dependent from independent claim 1) recites an implant having a body with a "substantially cylindrical configuration" and a thread having an outer locus forming "a substantially frusto-conical configuration along at least a portion of the length of said implant nearer said trailing end than said insertion end." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 3 and independent claim 1. Applicant submits that dependent claim 3 is patentable.

Claim 8 (dependent from independent claim 1) and claim 76 (dependent from independent claim 69) recite that the implant "is at least in part bioabsorbable." Zdeblick does not teach, disclose, or suggest an implant that is at least in part bioabsorbable as recited in dependent claims 8 and 76.

Application No. 08/480,908
Reply to Office Action dated September 30, 2005
Reply to Office Action of March 31, 2005

Claim 12 (dependent from independent claim 1) recites an implant having a thread with an outer locus "forming a substantially frusto-conical configuration along at least a portion of the length of said implant nearer said trailing end than said insertion end," the thread having "a thread height measured from said body which is variable along the length of said implant." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 12.

Claim 19 (dependent from claim 15 which depends from independent claim 1) recites an implant having a body with "an internal chamber and means for accessing said internal chamber," "means for closing said accessing means," and a thread with an outer locus "forming a substantially frusto-conical configuration along at least a portion of the length of said implant nearer said trailing end than said insertion end." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 19.

Claim 20 (dependent from claim 16, which depends from claim 15, which depends from independent claim 1) recites an implant having a body with "an internal chamber and means for accessing said internal chamber," the internal chamber being "capable of containing fusion promoting material," the body having "means for closing said accessing means," and a thread with an outer locus "forming a substantially frusto-conical configuration along at least a portion of the length of said implant nearer said trailing end than said insertion end." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 20.

Claim 22 (dependent from independent claim 1) recites an implant having a thread with an outer locus "forming a substantially frusto-conical configuration along at least a portion of the length of said implant nearer said trailing end than said insertion end," and "at least a portion of said outer surface comprises wells having at least partial walls." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 22.

Claim 24 (dependent from dependent claim 23, which depends from independent claim 1) recites an implant having a body with "at least one truncated

Application No. 08/480,908
Reply to Office Action dated September 30, 2005
Reply to Office Action of March 31, 2005

side," and a thread with an outer locus "forming a substantially frusto-conical configuration along at least a portion of the length of said implant nearer said trailing end than said insertion end," the thread having "a thread height measured from said body which is greatest at said truncated side." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 24.

Claim 78 (dependent from independent claim 69) recites an implant having a body with a "substantially frusto-conical configuration" and a thread with a thread radius measured from the longitudinal central axis of the implant, the thread radius being substantially uniform throughout the length of the implant. Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 78.

Claim 80 (dependent from independent claim 69) recites an implant having a body with a "substantially frusto-conical configuration" and a thread having "a thread height measured from said body which is variable along the length of said implant." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 80.

Claim 87 (dependent from claim 83 which depends from independent claim 69) recites an implant having a body with a "substantially frusto-conical configuration," an "internal chamber and an access opening for accessing said internal chamber," and "means for closing said accessing means." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 87.

Claim 89 (dependent from independent claim 69) recites an implant having a body with a "substantially frusto-conical configuration" and "at least a portion of said outer surface comprises wells having at least partial walls." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 89.

Claim 92 (dependent from claim 91 which depends from independent claim 69) recites an implant having a body with a "substantially frusto-conical configuration" and "at least one truncated side," and a thread with "a thread height measured from said

Application No. 08/480,908
Reply to Office Action dated September 30, 2005
Reply to Office Action of March 31, 2005

body which is greatest at said truncated side." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 92.

Claim 97 (dependent from dependent claim 23, which depends from independent claim 1) recites an implant having a body with "at least one truncated side," and a thread with an outer locus "forming a substantially frusto-conical configuration along at least a portion of the length of said implant nearer said trailing end than said insertion end" that "is continuous over at least a portion of said truncated side." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 97.

Claim 105 (dependent from independent claim 69) recites an implant having a body with a "substantially frusto-conical configuration," and a thread that "has a height measured from said body that is larger at said trailing end than at said insertion end." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 105.

Claim 112 (dependent from independent claim 108) recites an implant having a body with "arcuate portions" in a "diverging relationship to one another," and a thread having a thread radius measured from the longitudinal central axis of the implant, the thread radius being substantially uniform throughout at least a portion of the implant. Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 112.

Claim 114 (dependent from independent claim 108) recites an implant having a body with "arcuate portions" in a "diverging relationship to one another," and a thread having "a thread height measured from said body which is variable along the length of said implant." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 114.

Claim 116 (dependent from claim 115 which depends from independent claim 108) recites an implant having a body with "arcuate portions" in a "diverging relationship to one another," "an internal chamber and means for accessing said internal chamber,"

Application No. 08/480,908
Reply to Office Action dated September 30, 2005
Reply to Office Action of March 31, 2005

and a "means for closing said accessing means." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 116.

Claim 117 (dependent from independent claim 108) recites an implant having a body with "arcuate portions" in a "diverging relationship to one another" and "at least a portion of said outer surface comprises wells having at least partial walls." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 117.

Claim 122 (dependent from independent claim 108) recites an implant with a body having "arcuate portions" in a "diverging relationship to one another," and a thread with an outer locus forming a "substantially cylindrical configuration." Zdeblick does not teach, disclose, or suggest an implant having the claimed structure recited in dependent claim 122.

Accordingly, Applicant submits that claims 3, 8, 12, 19, 20, 22, 24, 25, 28-68, 70, 76, 78, 80, 87, 89, 92-95, 97, 101-105, 112, 114, 116, 117, 122, 126, 127, 130, 131, 135, 136, 140, and 141 are patentable over Zdeblick. Nonetheless, in order to expedite prosecution of the present application, Applicant is submitting together with this Reply a Declaration of Gary K. Michelson under 37 C.F.R. § 1.131 to remove Zdeblick as a reference for Applicant's claimed invention.

The Examiner rejected claims 152, 154-156, 160-163, 166-168, 172-174, and 178-180 under 35 U.S.C. § 103(a) as being unpatentable over Zdeblick in view of McKay. Applicant submits that the rejections over claims 152, 154-156, 160-163, 166-168, 172-174, and 178-180 are rendered moot at least because they depend from an allowable independent claim, or claims dependent therefrom.

Applicant submits that independent claims 1, 25, 49, 69, 108, 144, 183, 186, 193, and 194 are patentable and that dependent claims 2-8, 11-24, 28-48, 50-68, 70-107, 109-143, 145-156, 158-168, 170-174, 176-180, 182, 184, 185, and 187-192 dependent from independent claims 1, 25, 49, 69, 108, 144, 183, 186, 193, or 194, or claims dependent therefrom, are patentable at least due to their dependency from an allowable independent claim.

Application No. 08/480,908
Reply to Office Action dated September 30, 2005
Reply to Office Action of March 31, 2005

In view of the foregoing remarks, it is respectfully submitted that the claims are patentable. Therefore, it is requested that the Examiner reconsider the outstanding rejections in view of the preceding comments. Issuance of a timely Notice of Allowance of the claims is earnestly solicited.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this reply, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 50-1068.

Respectfully submitted,

MARTIN & FERRARO, LLP

Dated: September 30, 2005

By: 
Thomas H. Martin
Registration No. 34,383

1557 Lake O'Pines Street, NE
Hartville, Ohio 44632
Telephone: (330) 877-0700
Facsimile: (330) 877-2030